

## CLAIMS

What is claimed is:

- 1 1. A computer system, comprising:  
2 a host processor;  
3 a plurality of fan controllers coupled to said host processor; and  
4 a fan coupled to each fan controller;  
5 wherein the fan controllers are inter-connected by a fault signal which is used to transmit  
6 fault information between the fan controllers without host processor involvement.
- 2 2. The computer system of claim 1 wherein a fan controller receives said fault information  
3 from another fan controller and responds by changing the speed of its fan.
- 4 3. The computer system of claim 2 wherein said fan controller increases the speed of its fan.
- 5 4. The computer system of claim 1 further including a bridge disposed between said host  
6 processor and said fan controllers, said bridge also coupled to said fault signal.
- 1 5. The computer system of claim 1 wherein each fan controller includes a register which said  
2 host process can access to determine which fan controller asserted said fault signal.
- 1 6. The computer system of claim 5 wherein said register also includes bits which can be set  
2 by said host processor to cause said controller to not assert said fault signal upon detection of a  
3 fault.

1 7. The computer system of claim 1 wherein said register also includes bits which can be set  
2 by said host processor to cause said controller to not assert said fault signal upon detection of a  
3 fault.

1 8. The computer system of claim 1 wherein a fan controller asserts said fault signal upon  
2 detection of a fault with respect to its fan.

1 9. The computer system of claim 1 wherein a fan controller contains a register which contains  
2 a value of the fan speed when said fault information from another fan controller is received.

1 10. A fan controller, comprising:  
2 an interface to controlling logic;  
3 an interface to a fan which permits said fan controller to control the speed of said fan;  
4 a programmable register accessible by a host processor via said controlling logic; and  
5 an input/output fault signal adapted to be coupled to another fan controller through which  
6 fault information can be shared between fan controllers without host processor  
7 involvement.

1 11. The fan controller of claim 10 wherein said fan controller can receive said fault information  
2 from another fan controller and responds by changing the speed of its fan.

1 12. The fan controller of claim 11 wherein said fan controller increases the speed of its fan.

1 13. The fan controller of claim 10 wherein said controlling logic comprises a bridge disposed  
2 between said host processor and said fan controller, and said fault signal adapted to be provided to  
3 said bridge.

1 14. The fan controller of claim 10 wherein said register can be used by said host process to  
2 determine whether the fan controller asserted said fault signal.

1 15. The fan controller of claim 14 wherein said register also includes bits which can be set by  
2 said host processor to cause said fan controller to not assert said fault signal upon detection of a  
3 fault.

1 16. The fan controller of claim 10 wherein said register also includes bits which can be set by  
2 said host processor to cause said fan controller to not assert said fault signal upon detection of a  
3 fault.

1 17. The fan controller of claim 10 wherein said fan controller asserts said fault signal upon  
2 detection of a fault with respect to its fan.

1 18. The fan controller of claim 10 further including a register which contains a value of the fan  
2 speed when said fault information from another fan controller is received.

1 19. A method of controlling fans in a computer system having multiple fan controllers and a  
2 host processor, comprising:

- 3 (a) detecting a fault with respect to a fan;  
4 (b) transmitting fault information from one fan controller to another without using said  
5 host processor; and  
6 (c) responding to said asserted fault signal.

1 20. The method of claim 19 wherein (b) includes asserting a fault signal interconnecting at  
2 least one pair of said fan controllers.

3 21. The method of claim 19 wherein (c) includes increasing fan speed.